

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

Summer 7-12-2019

Reading habits and subjects predilection by mobile readers: A Study

Somipam R. Shimray

Pondicherry University, srshimray@yahoo.com

Chennupati K. Ramaiah

Pondicherry University, ckramaiah.lis@pondiuni.edu.in

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Information Literacy Commons](#), and the [Scholarly Communication Commons](#)

Shimray, Somipam R. and K. Ramaiah, Chennupati, "Reading habits and subjects predilection by mobile readers: A Study" (2019).

Library Philosophy and Practice (e-journal). 2805.

<https://digitalcommons.unl.edu/libphilprac/2805>

Reading habits and subjects predilection by mobile readers: A Study

Somipam R. Shimray*

Research Scholar (Ph.D), Department of Library & Information Science
Pondicherry University, Email: srshimray@yahoo.com

Chennupati K. Ramaiah**

Dean & Professor
School of Media & Communication, Department of Library & Information Science
Pondicherry University, Email: ckramaiah.lis@pondiuni.edu.in

Abstract

Purpose - The purpose of this study is to inspect the mobile reading behaviors and readers' content predilection in Hyderabad city, India and to find out the interrelated problems.

Design/methodology/approach - This study used a survey method and questionnaire tool for collecting data. Simple random sampling technique is employed to determine the sample population. SPSS software is used for analyzing data, independent t-test and One-Way ANOVA tests are conducted to test the stated hypotheses.

Findings - The findings from t-test results discloses that there is a significant difference concerning males and females in term of reading e-books (t-value = -2.570, p-value = 0.011), particularly stories/novels (t-value = -4.021, p-value = 0.001), and time spent for emails (t-value = -3.394, p-value = 0.001). Also there is a significant difference concerning occupation and in terms of reading online magazines (t-value = -2.181, p-value = 0.033), e-books (t-value = -2.357, p-value = 0.019), stories/novels (t-value = -3.423, p-value = 0.001), and time spent on emails (t-value = -2.151, p-value = 0.032). The ANOVA test results shows that online news has significant difference (F-value = 2.727, p-value = 0.030) in term of age groups and used of e-books (F-value = 4.149, p-value = 0.007), using emails (F-value = 2.807, p-value = .040), movie reviews (F-value = 5.738, p-value = 0.001) and comic strips or jokes (F-value = 5.896, p-value = 0.001) have significant difference in term of their educational qualification(s).

Originality/value - This paper help to comprehend the choice of reading a different type of contents based on demographic dissimilarities.

Keywords – Reading, Reading habits, Mobile reading habits, Type of contents, Purpose of mobile reading.

Paper type – Research paper

Introduction

Reading plays an important role in our day-to-day life. In today's society, reading has become ever more vital for acquiring and identifying the knowledge, gaining insight, expanding and sharing information. It is a continuous process in learning and a means to get innovative ideas and skills (Loan, 2009), vital for attaining information (Cunningham & Stanovich, 1998), basic pillars of education leading to lifelong learning (Satija, 2002), influences on the people to get their own ideas and create new knowledge (Sangkaeo, 1999), impact on the methods of thinking and reasoning (Loan, 2009) and to provide our views on an optimistic and constructive way (UNESCO, 2014). Reading and reading habits are dual facets that are acknowledged and are given growing consideration in the modern era. Computer literacy became a basic necessity for all citizens. Its impact is seen clearly in the field of education, social life, political and related areas (Shen, 2006). Nowadays, reading on mobile has become a universally accepted phenomenon (Ghosh, 2016), has extended impetus

across the globe beyond our imagination (Godwin-Jones, 2007). Many people in developing countries are using a mobile phone as a medium to read and eradicate illiteracy (UNESCO, 2014; Kubat, 2017). Denizens are attracted towards mobile reading as it is inexpensive, searchable, portable and readable (Loan, 2009; Lai & Chang, 2011).

Purpose of the Study

Preceding studies (Lesesne, 1991; Ogbodo, 2010; Owusu-Acheaw, 2014) examined different types of contents read by users to acquire knowledge, concentrating on how reading impact on academic performance but rarely focused on the screen to read different types of contents to acquire knowledge (Davidovitch, Yavich, & Druckman, 2016). Demographic differences such as gender, age, occupation and level of education show an impact on the choice of selecting material (Arias, 2007; Ogbodo, 2010), picking suitable material (Lotherington-Woloszyn & Nunan, 1989). Therefore, this study aims to bridge the existing gaps in the literature.

The objectives of the study are:

1. To examine the reading habits
2. To find out the mobile reading habits
3. To examine the content preferences by readers

Literature Review

Mobile reading is a fast-rising habit supported by different reading devices, software and applications (Pinto, Pouliot, & Cordón-García, 2014; Vasileiou, Hartley, & Rowley, 2009; Zhang, Zhu, Liu, & Yang, 2017). During the last decade, the use of the mobile phone had drastically increased. Previous research on mobile phone use has emphasized primarily on positive results such as breaking physical barriers (Geser, 2004; Berson, 2000; Choliz, 2010). Satija (2002) stated that reading is the way of acquiring knowledge and ideas therefore; one should read to increase knowledge, vital for education and intellectual growth of people that ultimately transform their life and society (Tella & Akande, 2007; Loan, 2009), becomes a habit when it is undertaken at regular intervals (Green, 2002). In quantitative terms, reading can be measured in terms of a number of books read, times of reading and the total time consumed in reading (Lai & Chang, 2011). Reading either for leisure or education is vital and it helps people to enhance their knowledge (Green, 2002).

Reading habit can be cultivated from their primary school days which are vital for an individual's growth (Holte, 1998; Kraaykamp, 2003), varies on the selection of subject (Tella & Akande, 2007), related to the reader's academic background, educational performance and professional development (Shen, 2006). Habit and interest in reading could be cultivated at primary age (Krashen, 1996; Green, 2002). Inculcating a sound reading habit is important for intellectual development and permits individuals to attain real-world competence. Routine reading enables an individual to reaffirm or improve one's own views and enables the individual to judge what is right and wrong (UNESCO, 2014).

Notwithstanding its unequivocal benefits, the uses of mobiles phones have been studied comprehensively and noticed damaging on their reading activities, (Barkana, Zadok, Morad, & Avni, 2004). Amongst the utmost common adverse consequences resulting from excessive use of mobile phones led to economic harms (Billieux, Linden, & Rochat, 2008), sleeplessness (Thomé, Härenstam, & Hagberg, 2011), addiction, pathological gambling, obsessive shopping and video-game cravings (Choliz, 2010). Nowadays many young adults and adolescents are the prime victims (Bianchi & Phillips, 2005) of mobile addiction. A survey conducted in Switzerland (Billieux, Linden, & Rochat, 2008; Billieux, Linden, d'Acremont, Ceschi, & Zermatten, 2007) discovered that a significant quantity (about 30%) of the respondents openly confessed that they are addicted to the mobile phone.

An external factor such as gender, age, educational qualification, subject background, economic status and technology cost (Chiang & Chen, 2014; Sangkhaeo, 1999; Shimray, Keerti, & Ramaiah, 2015; Krashen, 1996; Green, 2002) effect on the reading habits among students. A study conducted by Billieux, Linden, & Rochat (2008) pointed out that women have concentrated more on the use of mobiles than men. Other studies also found that females used based on previous experience (Billieux, Linden, & Rochat, 2008; Leung, 2008), however, these factors may vary across demographic variables such as age, gender (Billieux, Linden, & Rochat 2008; Leung, 2008). Therefore, we projected the following hypotheses:

- H1: There is no significant difference between male and female and reading a different type of contents
- H2: There is no significant difference between occupations and reading a different type of contents
- H3: There is no significant difference between ages and reading a different type of contents
- H4: There is no significant difference between educational qualifications and reading a different type of contents

Methodologies

This study employed a survey technique and questionnaire instrument for accumulating data. A simple random sampling technique was used to draw the sample population for this study. This study used SPSS software for analyzing data and independent t-test and One-Way ANOVA tests are used to test the hypotheses.

Sample and Data Collection

A structured questionnaire was designed and circulated to 300 people covering different professions in Hyderabad city. Of the total, 276 filled-in valid questionnaires were received back. To maintain a representative sample, we have taken important variables like gender, age group (in years), occupation, educational qualification(s), subject background, area of living and annual income. The personal data of these respondents is shown in *table I*. Of the total, 146 (52.9%) respondents belong to males and 130 (47.1%) belong to females. Concern to respondents ages, 100 (40.9%) respondents belong to 23-25 years age group, 113 (36.3%) belong to 20-22 years, 31 (11.2%) belong to 26-28 years, 18 (6.5%) belong to 29-31 years, and 14 (5.1%) belonged to 32 years and above age group. With regards to occupation, 185 (67%) of the respondents were students and 91 (33%) were employees working in various sectors. Considering to their educational qualifications, 179 (64.9%) had undergraduate degrees, 56 (20.3%) had postgraduate degrees, 26 (9.4%) had Ph.Ds. and 15 (5.4%) had integrated M.A./M.Sc. degrees. With regard to their subject area, 55 (19.9%) respondents are from Social Science, 54 (19.6%) are from Engineering, 45 (16.3%) are from Medicine, 43(15.6%) are from Science, 40 (14.5%) are from Information Technology and 39 (14.1%) are from Library and Information Science. Of the total, 206 (74.6%) of the respondents live in urban and 70 (25.4%) came from rural areas but living in Hyderabad city for their studies and doing jobs.

This study used a simple random sampling technique to collect data. The primary data for the study was collected from students and employees. As Isaac & Michael (1995) suggested using 10 – 30 participants for a pilot study, a pilot study was conducted by distributing 10 questionnaires and taken their feedback and incorporated in the questionnaire to improve the clarity, organization, language and format based on the suggestions and comments made.

Table I. Personal data of respondents

Measure	Item	Frequency	(%)
Gender	Male	146	52.9%
	Female	130	47.1%
Age Group (years)	20-22	100	36.2%
	23-25	113	40.9%
	26-28	31	11.2%
	29-31	18	6.5%
	Above 32	14	5.1%
Occupation	Students	185	67.0%
	Employee	91	33.0%
Highest Educational Qualification(s)	Integrated M.A/M.Sc.	15	5.4%
	Graduate	179	64.9%
	Postgraduate	56	20.3%
	Ph.D.	26	9.4%
Subject Background	Science	43	15.6%
	Medicine	45	16.3%
	Information technology	40	14.5%
	Engineering	54	19.6%
	Social Science	55	19.9%
	Library Science	39	14.1%
Area of Living	Urban	206	74.6%
	Rural	70	25.4%

Source: Primary data

Results and Discussion

The data collected were examined keeping the objectives in attention and prepared appropriate tables and graphs for easy understanding.

Reading Habits

Owusu-Acheaw (2014) found that reading helps the learner in gaining the meaningful and required knowledge and it is an imperative and significant characteristic for building a knowledge society.

Time spent daily on mobile phones for reading

Respondents were asked to indicate the amount of time spend on reading purpose over mobile phone on a daily basis (*figure 1*). Overall, two fifths (44.57%) of the respondents used mobile phones for an hour and one fourth (24.28%) used mobile phones for 2 hours daily, 14.86% used 3 hours, 12.31% used five hours and above, and 3.98% used for 4 hours a day. This indicates that respondents have a concern about their health so they are using the phones carefully.

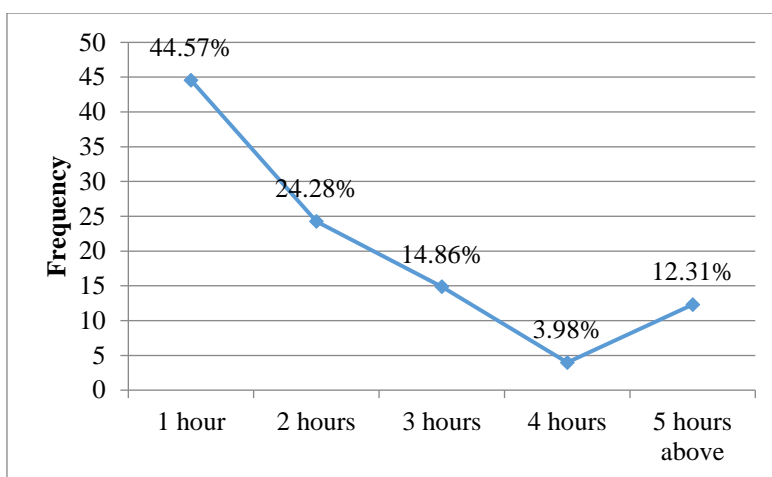


Figure 1: Time spent daily on mobile phones for reading

Type of materials read

Users read different types of materials as shown in *figure 2*. Of the total, about one third (29.05%) of them read newspapers, closed to one fifth (18.18%) read subject related materials, one-sixth (17.96%) read textbooks, 15.52% read novels, one-tenth (9.53%) read magazine, 5.54% read other types of materials, and 4.21% read journals articles.

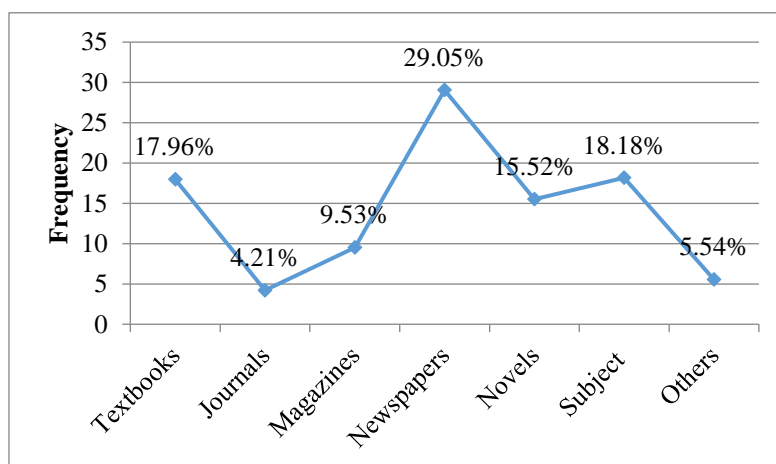


Figure 2. Type of materials read

Reading while lying on the bed

Reading varies from person to person, so respondents were asked to indicate their reading habits (*figure 3*). One of the common ways of reading is leisurely lying on the bed. Of the total, over half (53.75%) of them indicated as ‘*often*’ and ‘*very often*’ reading while lying on the bed which is bad for their health. About a fourth (24.39%) indicated as ‘*sometimes*’. Generally, when reading a book while lying, readers hold the book over their face to read thus, limited light is reflected on the pages resulting in poor visibility. Therefore, reading while lying is not good for the eyes. More so whenever they read in lying position for long periods, readers try to adjust their neck which may cause neck strain.

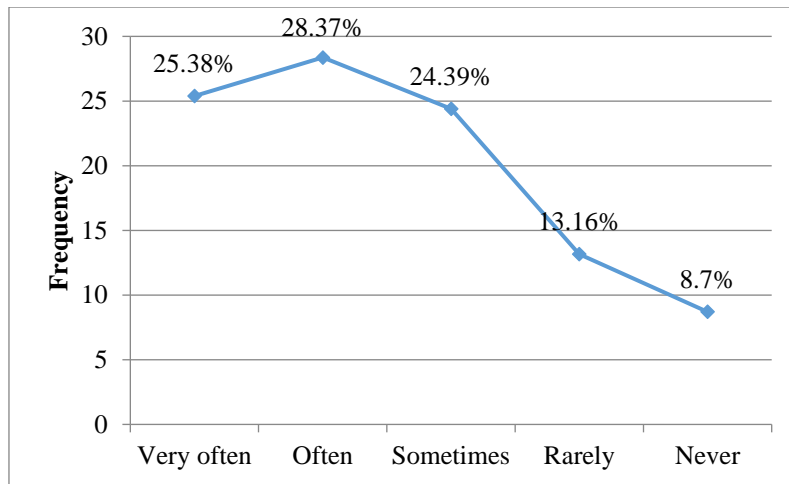


Figure 3. Reading while lying on the bed

Mobile Reading Habits

Owing to recent technological development in ICTs, mobile devices are abundantly available all over the world. Besides used for communication, it is extensively used for reading purposes (UNESCO, 2014). Respondents were asked to indicate their opinions on reading habits through mobile phones. Of the total, most of them (91.3%) have a mobile phone with internet access. Over two third (68.8%) have a habit of reading on mobile phones, while less than a third (31.2%) are not using mobile phones for reading. Two third (66.3%) are comfortable in reading on mobile phones whereas one third (33.7%) are not so comfortable. Four-fifths (84.4%) of the respondents felt that mobile phone reading helps them in their studies while marginal (15.6%) percentage of them do not believe the same.

Respondents were asked about the various purposes of reading online materials (figure 4). Of the total, more than one third (40.58%) of the respondents used mobile phones for reading general information, one fifth (19.25%) read work-related materials, 15.11% for reading examination-related materials, 13.66% of them reading for subject knowledge, one-tenth (9.32%) used mobile phones for pleasure reading such as fiction, magazines, etc. type of materials and small percentage of them (2.07%) used for other purposes including entertainment such as Facebook, Twitter, WhatsApp, WeChat, etc. It is also found in other studies that reading through mobiles helps in their studies (Muniandy, 2010).

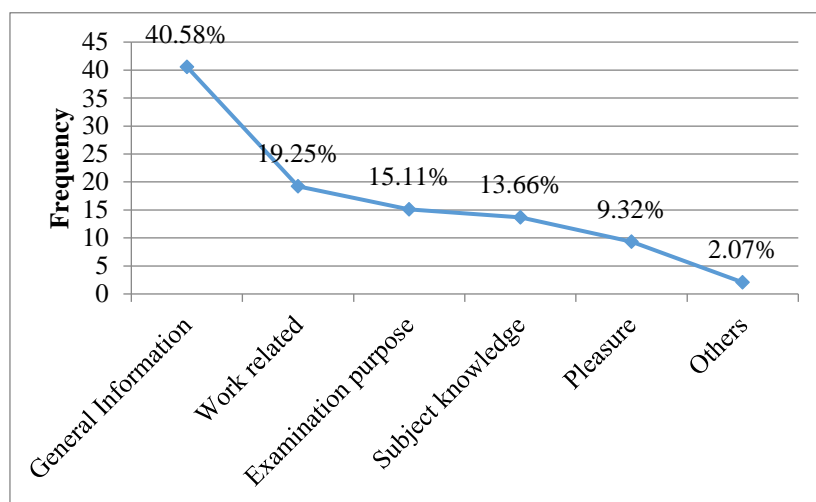


Figure 4. Purpose(s) of reading online materials

Types of content read on mobile phones

Mobile phones are extensively used for different purposes (Loan, 2009) including for checking emails, social networking and listening music (Krashen, 1996). Respondents were asked to indicate their opinion on contents usually read on mobile phones (*table II*). Of the total, more than one third (42.09%) indicated as ‘often’ to ‘very often’ regarding the use of mobile phones for reading online news, more than one third (38.41%) of them indicated as ‘rarely’ to ‘never’ concerning the use of mobile phones for reading online magazines, more than one third (38.77%) of them specified as ‘often’ to ‘very often’ concerning the use of mobile phones for reading eBooks. Whereas, 37.69% of them indicated as ‘rarely’ to ‘never’ with regard to reading stories and novels on mobiles. Also found, the majority (71.74%) of them used mobile phones for checking emails regularly so indicated as ‘often’ to ‘very often’. Closed to two thirds (61.59%) of them indicated as ‘never’ to ‘rarely’ concerning the use of mobile phones for listening to audio books. More than two thirds (40.94%) indicated as ‘never’ and ‘rarely’ about the use of mobile phones to check movie reviews. More than half (54.7%) of the respondents designated as ‘rarely’ to ‘never’ about the use of mobile phones for reading comics and jokes.

Table II. Content usually read on mobile phones

Statement \ Rating	Never %	Rarely %	Sometimes %	Often %	Very Often %
Online news	10.44	14.86	32.61	26.45	15.64
Online magazines	21.01	17.40	31.16	26.45	3.98
E-books	16.30	15.58	29.35	30.44	8.33
Stories/ novels	19.20	18.49	25.00	31.15	6.16
Emails	3.99	6.52	17.75	31.52	40.22
Listen to audio books	48.91	12.68	19.57	10.51	8.33
Movie reviews	28.26	12.68	24.64	15.22	19.20
Comic strips or jokes	41.66	13.04	22.83	11.96	10.51

Reading over mobile phones

Certain parameters like font size, font type, reflection from screen, resolution and user interfaces (Boyarski, Neuwirth, Forlizzi, & Regli, 1998) are vital for the users when they are reading on the screen. Georgia and Verdana fonts found to be good for on-screen reading (Boyarski et al., 1998). All older people preferred 9-11 font sizes and younger people preferred 10 font sizes while reading on screen (Cambridge, 2005). Also, it is found that factors that are useful to read better on a mobile phone are font size, font style and font color. Of the total, half (53.96%) of the respondents felt that font size plays a vital role when it comes to readability. Over a fourth (24.55%) opined that font color assists them while reading on mobile phones and while one fifth (18.41%) opined that font style supports better in reading on mobiles. From this data, it is clear that font color, size and style are vital and provide better visibility, legibility and readability of the text while reading on mobiles. Nowadays most of the equipment’s are designed keeping the young people’s interest in mind due to their large market share. Other features like is user-friendly, stylish and good user interfaces to attract the users of all age groups particularly young people.

Parameters helpful for reading on mobile phones

Interactive user interface certainly draws to the attention of the readers; articles or content with the graphs, tables, images make the readers more interesting (Berson, 2000). This study also reveals similar results like different parameters that are affecting their mobile reading (*figure 5*). Reflection from the screen (21.09%), high resolution (17.40%) and text scrolling

(16.87%) are the top three parameters that distract the users while reading on mobiles. High contrast (14.06%), line spacing (12.13%), line length (9.84%) also hampers the reading on mobiles while marginal navigational clues (7.91) and other factors (0.70%) like ads affect reading on mobile phones. Long text and long scrolling complicates the readers and losing the attention on the content, however, line length and line spacing are challenging obstacles so this has to be considered carefully to avoid diverting the reader's attention. Line length needs to be made into smaller portions; thereby reader will be able to pay their full attention to content while reading.

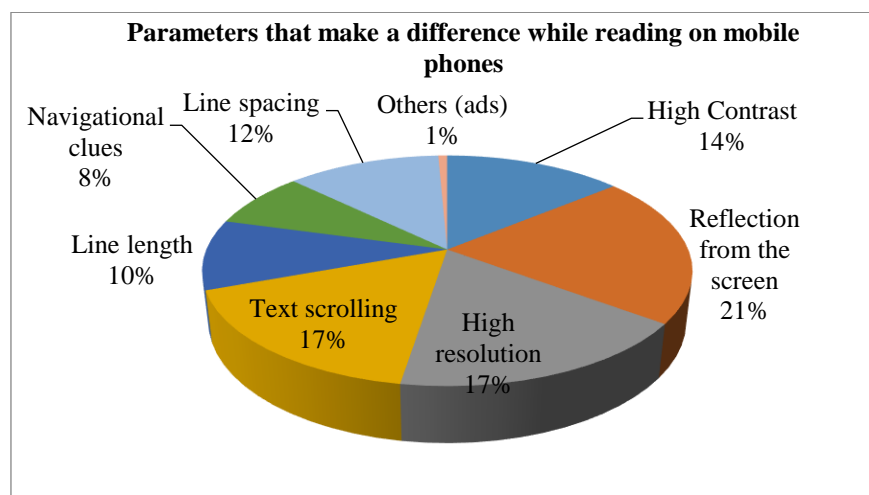


Figure 5. Parameters that make a difference while reading on mobile phones

Health-related problems

Many studies noticed that continuous reading for longer periods on mobile phones could result into various types of health problems (Billieux, 2012; Khan, 2008; Shimray, Keerti, & Ramaiah, 2015) including sleeplessness, headache and reduction of hearing capacity. In this study, the majority (60.15%) takes a break after every 30 minutes, which is a good habit among the readers to take care of their health (*figure 6*). One fifth (21.01%) of them takes a break after an hour, 19 (6.88%) take a break after every 2 hours, a small percentage of respondents (6.88%) takes a break after 3 hours and 5.07% takes a break after 3 hours. Khan (2008) conducted a study on adverse effects of excessive mobile phones use and found that on an average daily more than half (55.94%) of them used for 30 minutes, 27.97% used for 30-60 minutes, 11.53% used for 60-90 minutes and 4.54% used for more than 90 minutes. The way cigarette companies are printing warnings to smokers, the same way mobile manufacturers should also warn or give precautions to the readers to safeguard them from harmful effects. Prolonged use of the mobile phone can harm on our health, therefore users are advised to take a break after every 30 minutes of mobile use and avoid for prolonged mobile use daily.

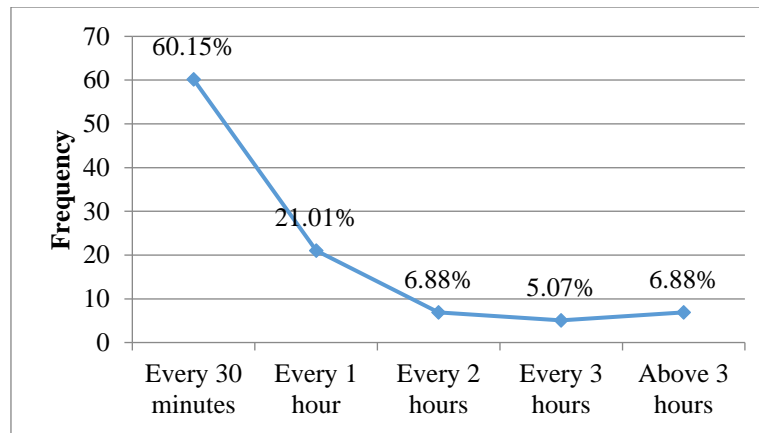


Figure 6. Frequency of taking a break while reading on mobile

Content preference in mobile reading

Various features enhance the readability and attracted the users to read on mobiles continuously (Boyarski, Neuwirth, Forlizzi, & Regli, 1998; Godwin-Jones, 2007). Respondents were asked to indicate their preference which varied from mono-media (plain text) to multimedia. It was found that closed to half (48.64%) preferred reading text with images. This shows that young respondents want interactive reading materials to avoid monotonous reading of text-only content, 18.73% preferred reading long text files, another group of same size (18.73%) preferred multimedia content in linear form over long linear text, while the remaining respondents (13.9%) preferred using multimedia content with hypertext links.

Problems in mobile reading

Khan (2008) study discovered that one third (34.27%) reported impaired concentration, more than one third (40.56%) reported memory disturbances, another 38.8% reported sleeplessness, closed to one fourth (23.07%) reported hearing problems, and 16.78% reported facial dermatitis. Billieux (2012) noticed that cellular phones are quite harmful, damaging and potential cause of health-related problems. So, mobile reading has its own drawbacks besides being useful. The majority of the respondents (79.7%) revealed that they faced certain problems while reading on mobiles like body pain, eyes strain, shedding tears and headache. The respondents were asked to indicate the problems faced while reading on mobile phones. Of the total, about half (49.85%) of them faced eyes strain, 19.10% of them experienced headache, 16.72% experienced tears shedding, 11.34% experienced body pain, and 2.99% experienced insomnia. Excessive use of mobile phones can impact on psychology and health, thus, its impact should be made known to all potential users for taking required precautions.

Results of Parametric test

A parametric test was conducted to justify the stated hypotheses. Males and females have different choices while reading varied types of content (*table III*). Females favored to read more stories/novels, e-books and checking of emails on their mobiles regularly. The t-test analysis shows that there is a significant difference between males and females in term of reading e-books (t-value = -2.570, p-value = 0.011), stories/novels (t-value = 4.021, p-value = 0.001), and using for emails (t-value = 3.394, p-value = 0.001). However, there is no significant difference between males and females in terms of reading online news, e-magazines, audio-books, movie reviews, comic strips and jokes.

Table III. T-test results between Gender and Types of content

Types of content	Gender	Mean	t-Value	P-Value*	Finding
Online news	Male	3.2466	0.431	0.667	Not supported
	Female	3.1846			
Online magazines	Male	2.6000	-1.051	0.294	Not supported
	Female	2.9231			
E-books	Male	2.8703	-2.570	0.011**	Supported
	Female	3.2308			
Stories/novels	Male	2.6811	-4.021	0.001**	Supported
	Female	3.2088			
Emails	Male	3.8757	-3.394	0.001**	Supported
	Female	4.1758			
Audiobooks	Male	2.2703	-1.457	0.149	Not supported
	Female	1.9560			
Movie reviews	Male	2.7568	-1.253	0.211	Not supported
	Female	3.0220			
Comic strips and jokes	Male	2.2541	-0.205	0.838	Not supported
	Female	2.5714			

** Sig at 0.05 level

The t-test results shows that there is a significant difference (*table IV*) between occupation in terms of reading online magazines (t-value = -2.181, p-value = 0.033), e-books (t-value = -2.357, p-value = 0.019), stories/novels (t-value = -3.423, p-value = 0.001) and emails (t-value = -2.151, p-value = 0.032). However, there is no significant difference between occupation in terms of reading online news, audio books, movie reviews and comic strips and jokes. Students and employees read diverse types of contents on mobiles. Students mostly read online magazines, e-books, stories/novels, and check for emails frequently over mobiles.

Table IV. T-test results: Occupation vs. Types of content

Types of content	Gender	Mean	t-Value	P-Value*	Finding
Online news	Student	3.1568	-1.209	0.228	Not supported
	Employee	3.3407			
Online magazines	Student	2.6000	-2.181	0.033**	Supported
	Employee	2.9231			
E-books	Student	2.8703	-2.357	0.019**	Supported
	Employee	3.2308			
Stories/novels	Student	2.6811	-3.423	0.001**	Supported
	Employee	3.2088			
Emails	Student	3.8757	-2.151	0.032**	Supported
	Employee	4.1758			
Audiobooks	Student	2.2703	1.820	0.070	Not supported
	Employee	1.9560			
Movie reviews	Student	2.7568	-1.412	0.159	Not supported
	Employee	3.0220			
Comic strips and jokes	Student	2.2541	-1.790	0.075	Not supported
	Employee	2.5714			

** Sig at 0.05 level

The different age groups have opted for reading diverse types of contents (*table V*). The ANOVA test shows that online news has a significant difference (F-value = 2.727, p-value =

0.030) in term of age groups. Conversely, there is no significant dissimilarity between ages in term of content preference such as online magazines, e-books, stories/ novels, emails, audiobooks, movie reviews and comic strips or jokes.

Table V. ANOVA results: Age vs. Types of content

		Mean Square	F-Value	P-Value	Finding
Online news	Between Groups	3.763	2.727	0.030**	Supported
	Within Groups	1.380			
Online magazines	Between Groups	1.960	1.454	0.217	Not supported
	Within Groups	1.348			
E-books	Between Groups	1.641	1.133	0.341	Not supported
	Within Groups	1.448			
Stories/ novels	Between Groups	1.701	1.132	0.342	Not supported
	Within Groups	1.503			
Emails	Between Groups	1.640	1.371	0.244	Not supported
	Within Groups	1.197			
Audiobooks	Between Groups	2.673	1.467	0.212	Not supported
	Within Groups	1.822			
Movie reviews	Between Groups	2.445	1.134	0.341	Not supported
	Within Groups	2.157			
Comic strips or jokes	Between Groups	3.095	1.616	0.170	Not supported
	Within Groups	1.916			

** Sig at 0.05 level

The ANOVA test (*table VI*) shows that e-books (F-value = 4.149, p-value = 0.007), emails (F-value = 2.807, p-value = .040), movie reviews (F-value = 5.738, p-value = 0.001) and comic strips or jokes (F-value = 5.896, p-value = 0.001) have significant difference in term of their educational qualification, while for the rest of the contents there is no significant difference among age groups (*table VI*). Preference of reading with different types of content differs with educational qualification. Graduates mostly read e-books, check for emails, movie reviews and comic strips or jokes.

Table VI. ANOVA results: Educational Qualification vs. Types of content

		Mean Square	F-Value	P-Value	Findings
Online news	Between Groups	2.411	1.718	0.164	Not supported
	Within Groups	1.403			
Online magazines	Between Groups	1.337	0.985	0.400	Not supported
	Within Groups	1.357			
E-books	Between Groups	5.820	4.149	.007**	Supported
	Within Groups	1.403			
Stories/ novels	Between Groups	3.243	2.181	0.091	Not supported
	Within Groups	1.487			
Emails	Between Groups	3.311	2.807	0.040**	Supported
	Within Groups	1.180			

Audiobooks	Between Groups	1.655	0.901	0.441	Not supported
	Within Groups	1.836			
Movie reviews	Between Groups	11.792	5.738	0.001**	Supported
	Within Groups	2.055			
Comic strips or jokes	Between Groups	10.818	5.896	0.001**	Supported
	Within Groups	1.835			

** Sig at 0.05 level

Conclusion

The outcome of the study obviously shows the role of mobile reading in the present era in terms of lifelong learning. Reading remains the most phenomenal habit of any individual for knowledge growth, basic tool and prerequisite for any level of education, vital tool for individual growth and also provides a gateway to economic, communal and public life. Reading and reading habits are dual facets that are acknowledged growing attention in the modern era. A mobile phone is no longer a luxury; rather it has become a basic necessity for all denizens. In the present scenario, mobile reading has changed the behavior and reading habits of people and almost become a universal tool for reading. Vital parameters such as font size, reflections from the screen, interactive interfaces are some of the issues to be given prime attention for reading on mobile phones. Health problems like body pain, eyes strain, shedding tears, headache, neck pain, back pain, sore eyes, sleeping problem are triggered by reading on mobiles for longer hour. Despite certain problems caused by reading via screens, an online reading trend is becoming more popular day-by-day. However, utmost care should be taken by readers while reading on screen. With regard to these side effects, we need to wait and see how the readers will act and change their reading habits in the light of upcoming technological innovations. From time to time, changes are inevitable, but that should not harm the readers. Therefore, one has to wait and see the impact of technological changes on the reading habits of people. Future researchers can explore extensively on health-related issues caused by due to excessive usage of mobiles, animated interfaces, 3D reading and real-time reading.

Acknowledgments

Somipam R. Shimray gratefully acknowledges Dr. S. Riasudeen, Associate Professor, Department of Management Studies, School of Management, Pondicherry University for his valuable help in analysis. The authors thank the anonymous reviewers for the valuable suggestions and comments which helped improve the quality of the original manuscript.

References

- Arias, I. J. (2007). Selecting Reading Materials Wisely. *Letras*, 41, 131-151.
- Barkana, Y., Zadok, D., Morad, Y., & Avni, I. (2004). Visual field attention is reduced by concomitant hands-free conversation on a cellular telephone. *Am J Ophthalmol*, 138(3), 347-53.
- Berson, M. (2000). Effectiveness of computer technology in the social studies: A review of the literature. *Journal of Research on Computing in Education*, 2(4), 486-499.
- Bianchi, A., & Phillips, J. G. (2005). Psychological predictors of problem mobile phone use. *CyberPsychology & Behavior*, 8(1), 39-51.
- Billieux, J. (2012). Problematic Use of the Mobile Phone: A Literature Review and a Pathways Model. *Current Psychiatry Reviews*, 8(4), 1-8.

- Billieux, J., Linden, M. V., & Rochat, L. (2008). The role of impulsivity in actual and problematic use of the mobile phone. *Applied Cognitive Psychology*, 22(9), 1195-1210.
- Billieux, J., Linden, M. V., d'Acremont, M., Ceschi, G., & Zermatten, A. (2007). Does impulsivity relate to perceived dependence on and actual use of the mobile phone. *Appl. Cognit. Psychol.*, 21(4), 527-537.
- Boyarski, D., Neuwirth, C., Forlizzi, J., & Regli, S. (1998). A study of fonts designed for screen display. *Proceedings of CHI'98* (pp. 87-94). Los Angeles: ACM Press.
- Chiang, H.-S., & Chen, C.-C. (2014). Exploring switch intention of users' reading behaviour: An e-book reader case study. *The Electronic Library*, 32(4), 434-457.
- Choliz, M. (2010). Mobile phone addiction: A point of issue. *Addiction*, 105(2), 373-374.
- Cunningham, A., & Stanovich, K. (1998). What reading does for the mind? *American educator*, 22(1), 8-15.
- Davidovitch, N., Yavich, R., & Druckman, E. (2016). Don't Throw Out Paper And Pens Yet: On The Reading Habits Of Students. *Journal of International Education Research*, 12(4), 129-144.
- Geser, H. (2004). *Towards a Sociological Theory of the Mobile Phone*. Retrieved 01 10, 2018, from World Wide Web: http://socio.ch/mobile/t_geser1.htm
- Ghosh, M. (2016). E-books in the mobile age: advocacy and acceptance in India. *Library Hi Tech News*, 33(6), 5-10.
- Godwin-Jones, R. (2007). Emerging technologies, e-texts, mobile browsing, and rich internet applications. *Language Learning & Technology*, 11(3), 8-13.
- Green, P. (2002). Teachers intervention in children's reading. *Journal of Child Hood Education*, 46(3), 147-149.
- Hocking, B., & Westerman, R. (2002). Neuphrological changes induced by a mobile phone. *Occupational Medicine*, 52(7), 413-415.
- Holte, M. S.-t. (1998). Creating an optimum reading culture in the Low Countries: The role of Stichting Lezen. *64th IFLA General Conference*. Amsterdam: IFLA.
- Isaac, S., & Michael, W. (1995). *Handbook in research and evaluation: A collection of principles, methods, and strategies useful in the planning, design, and evaluation of studies in education and the behavioral sciences* (3 ed.). San Diego: Edits Publication.
- Khan, M. M. (2008). Adverse Effects of Excessive Mobile Phone Use. *International Journal of Occupational Medicine and Environmental Health*, 21(4), 289-293.
- Kraaykamp, G. (2003). Literary socialization and reading preferences. Effects of parents, the library, and the school. *Poetics*, 31(3-4), 235-257.
- Krashen, D. (1996). Comic book reading, enjoyment and pleasure reading among middle school students. *Journal of Reading Improvement*, 53(1), 51-54.
- Kubat, G. (2017). The mobile future of university libraries and an analysis of the Turkish case. *Information and Learning Science*, 118(3/4), 120-140.
- Lai, J.-Y., & Chang, C.-Y. (2011). User attitudes toward dedicated e-book readers for reading: The effects of convenience, compatibility and media richness. *Online Information Review*, 35(4), 558-580.
- Lesesne, T. S. (1991). Developing lifetime readers: Suggestions from fifty years of research. *The English Journal*, 80(6), 61-64.

- Leung, L. (2008). Linking Psychological Attributes to Addiction and Improper Use of the Mobile Phone among Adolescents in Hong Kong. *Journal of children and media*, 2(2), 93-113.
- Loan, F. A. (2009). Impact of New Technology on Reading Habits: A Glimpse on the World Literature. *Documentation and Information (DLDI)* (pp. 212-218). New Delhi: NCERT.
- Lotherington-Woloszyn, & Nunan, D. (1989). *Designing Tasks for the Communicative Classroom*. New York: Cambridge University Press.
- Muniandy, B. (2010). Academic Use of Internet among Undergraduate Students: A Preliminary Case Study in a Malaysian University. *International Journal of Cyber Society and Education*, 3(2), 171-178.
- Ogbodo, R. O. (2010). Effective study habits in educational sector: counselling implications. *Edo Journal of Counselling*, 3(2), 229-239.
- Owusu-Acheaw, M. (2014). Reading Habits Among Students and its Effect on Academic Performance: A Study of Students of Koforidua Polytechnic. *Library Philosophy and Practice (e-journal)*(1130), 1-22.
- Pinto, M., Pouliot, C., & Cordón-García, J. A. (2014). E-book reading among Spanish university students. *The Electronic Library*, 32(4), 473-492.
- Rainie, L., Zickuhr, K., Purcell, K., Madden, M., & Brenner, J. (2012). *The rise of e-reading*. Washington: Pew Research Center's.
- Richardson, M., Abraham, C., & Bond, R. (2012). Psychological Correlates of University Students' Academic Performance: A Systematic Review and Meta-Analysis. *American Psychological Association*, 138(2), 353-387.
- Sangkaeo, S. (1999). Reading habit promotion of ASEAN libraries. *65th IFLA Council and General Conference, Bangkok*. Thailand: IFLA.
- Satija, M. (2002). Reading and book culture. *Herald of Library Science*, 41(1-2), 55-59.
- Shabi, I. N., & Udofia, E. P. (2009). Role of the school library in promoting reading culture in Nigeria. *International Journals of Research in Education*, 6(1-2), 259-269.
- Shen, L.-B. (2006). Computer Technology and College Students' Reading Habits. *Chia -nan annual bulletin*, 32, 559-572.
- Shimray, S. R., Keerti, C., & Ramaiah, C. K. (2015). An Overview of Mobile Reading Habits. *DESIDOC Journal of Library & Information Technology*, 35(5), 343-354.
- Smith, F. (1988). *Ullersralldillg Reading: A PsycllOlillgllisric Allalysis of Readillg alld Leamillg*. Hillsdale: Erlbaum.
- Tella, A., & Akande, S. (2007). Children's reading habits and availability of books in Botswana primary schools: Implications for achieving quality education. *The Reading Matrix*, 7(2), 117-142.
- Thomée, S., Härenstam, A., & Hagberg, M. (2011). Mobile phone use and stress, sleep disturbances, and symptoms of depression among young adults-a prospective cohort study. *BMC Public Health*, 11(1), 66.
- UNESCO. (2014). *Reading in the mobile era: A study of mobile reading in developing countries*. Retrieved July 12, 2016, from World wide web: <http://unesdoc.unesco.org/images/0022/002274/227436E.pdf>
- Vasileiou, M., Hartley, R., & Rowley, J. (2009). An overview of the e-book marketplace. *Online Information Review*, 33(1), 173-179.

- Young, B., Hausler, J., & Sanders, J. W. (2008). Do Online Students Exhibit Different Learning Styles than Onsite Students? *International Journal of Instructional Technology and Distance Education*, 5(4).
- Zhang, M., Zhu, M., Liu, X., & Yang, J. (2017). Why should I pay for e-books?: An empirical study to investigate Chinese readers' purchase behavioural intention in the mobile era. *The Electronic Library*, 35(3), 472-493.
- Zhang, Y., & Kudva, S. (2014). E-books Versus Print Books: Readers' Choices and Preferences Across Contexts. *The Association for Information Science and Technology*, 65(8), 1695–1706.